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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/939,240	08/24/2001	John W. Davies	38190/206669	2206
826	7590	01/30/2006	EXAMINER	
ALSTON & BIRD LLP BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000 CHARLOTTE, NC 28280-4000			TORRES, MELANIE	
			ART UNIT	PAPER NUMBER
			3683	

DATE MAILED: 01/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/939,240	DAVIES ET AL.	
	Examiner	Art Unit	
	Melanie Torres	3683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11, 12 and 19-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11, 12 and 19-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 4, 6, 19-22, 25, 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 06229426 in view of Yabe et al. and further in view of EP 0223268.

Re claims 1, 4, 6, 19-22, 25, 26, JP 06229426 teaches a bearing assembly comprising a pair of bearing members (1, 2, 3) movable relative to one another, the pair including a first member (1, 2) and a second member (3) that define a space therebetween, at least the first member (1, 2) having a bearing surface having a relatively thin coating of a PTFE-based material (1a, 2a) thereupon and a grease lubricant (6) occupying the space defined between the first member and the second member, wherein the PTFE-based material and the grease lubricant act in conjunction with one another to lubricate the first and second members. JP 06229426 does not teach wherein the coating includes a thermosetting resin and wherein the PTFE-based material thickness has a thickness of about 0.003-0.007 inches. Yabe et al. teach a coating including a thermosetting resin. (Column 10, lines 24). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have

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included the thermosetting resin of Yabe et al. in the invention of JP 06229426 in order to enhance the mechanical strength of the coating. Further, EP 0223268 teaches a PTFE-based material thickness of about 0.003-0.007 inches. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the material thickness of EP 0223268 in the bearing assembly of JP 06229426 in order to provide additional wear resistance. Further, it has been held that where general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Re claims 4 and 11, JP 06229426 teaches wherein the first member (12) is formed from the group consisting of steel, titanium, aluminum, nickel, bronze and alloys thereof. (Column 1, lines 5-7)

Re claim 6, JP 06229426 teaches wherein the coating is a self-lubricating material.

Re claims 21, and 25, it would have been obvious to have provided the first and second members spaced by a distance between 0.006 inch and 0.008 inch since it has been held that where general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

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3. Claims 7, 8, 20, 23, 24, 27 and 28, are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 06229426 in view of Yabe et al. and EP 0223268 and further in view of Whitworth (US 3,974,988).

Re claims 7, and 20, JP 06229426 as modified above teaches all the limitations except wherein the bearing assembly is for a truck pivot joint bearing. Whitworth teaches a bearing assembly is for a truck pivot joint bearing. (Figure 5) It would have been obvious to have provided the bearing of JP 06229426 as modified above in the landing gear of Whitworth in order to provide additional lubrication to the joint.

Re claims 8, 23, 24, 27 and 28, see above.

4. Claims 2, 5, 9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 06229426 as modified above and further in view of Furukoshi et al.

Re claims 2, and 9, JP 06229426 does not teach wherein the coating is a PTFE-based material having a solid particulate in a form selected from the group consisting of flocked, powdered, fibrous, flaked, or beaded. Furukoshi et al. teach wherein the coating is a PTFE-based material having a solid particulate in a form selected from the group consisting of flocked, powdered, fibrous, flaked, or beaded. (Column 3, lines 23-33) It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the PTFE-based material of Furukoshi et al. since powdered PTFE-based materials are well known for lubricating bearing elements.

Re claims 5 and 12, Furukoshi et al. teach sliding bearing comprising a seal (17) positioned in the space defined between first and second members. It would have been obvious to include a seal in the assembly of JP 06229426 as modified so as to reduce the amount of debris that would interfere with the operation of the bearing.

Response to Arguments

5. Applicant's arguments filed January 12, 2006 have been fully considered but they are not persuasive.

The Office Action mailed July 12, 2005 was inadvertently processed as a Final rejection. However, the rejection was non-final. Further the claims added in the response filed January 13, 2005 were overlooked. Therefore, the current Office Action is made non-final.

Applicant argues that the prior art of record does not teach a thermosetting stabilizer in the PTFE coating because the polymer should be separated from the bearing surface by a grease layer. The examiner would like to point out that the PTFE coating (50) shown by Applicant in Figure 7 is separated from the bearing surface (24) by a grease layer (58). It is unclear to the examiner what significance this has with respect to the inclusion of a thermosetting stabilizer. Additionally, Tajajo et al. also teaches wherein PTFE is mixed with a thermosetting resin to increase wear resistance. Therefore, the rejections above are maintained.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Torres whose telephone number is (571)272-7127. The examiner can normally be reached on Monday-Friday, 6:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James McClellan can be reached on (571)272-6786. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MT
January 23, 2006

Melanie Torres
Melanie Torres
Primary Examiner
1-23-06